

**Please add the following Abstract of the Disclosure:**

**Abstract**

A process for producing fibrous material, comprising a lignocellulosic material with phenolic or similar structural groups, and a signaling agent, said process comprising the steps of oxidizing phenolic or similar structural groups of the lignocellulosic matrix to provide an oxidized fibre material, and directly, or via a tagging agent binding to the oxidized fibre material with a signaling agent which is capable of providing the lignocellulosic fibre material with properties foreign to the native fibre so that the fibres or products prepared therefrom can be detected. The signaling agent bonded to the fibres makes it possible to identify the product, trace it and to use it as a security/anti-counterfeit product.